

IN THE CLAIMS

Please amend Claims 1-3 and 7-11, to read as follows.

1. (Currently Amended) A method of manufacturing an ink jet head which includes a discharge port for discharging an ink droplet, an ink flow path communicated with the discharge port, and an energy generating element for discharging the ink droplet from the discharge port, the method for manufacturing an ink jet head comprising:

    a process of forming a photodegradable positive type resist layer on a substrate having the energy generating element;

    a process of forming a structure which becomes the ink flow path by exposing and developing the photodegradable positive type resist layer;

    a process of coating the substrate having the structure which becomes the ink flow path with a negative type resist layer;

    a process of forming the ink discharge port in the negative type resist layer; and

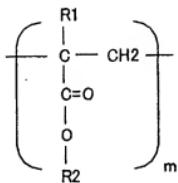
    a process of forming the ink flow path communicated with the discharge port by removing the structure which becomes the ink flow path,

    wherein the photodegradable positive type resist layer includes an acrylic copolymer composition, the acrylic copolymer composition ~~contains~~ contains at least a unit obtained from (meta) acrylic ester as a main ~~content~~ component, the acrylic copolymer composition further ~~contains~~ contains a unit obtained from (meta) acrylic acid, the acrylic copolymer composition contains the (meta) acrylic acid unit at a

proportion of 5 to 30 weight%, and a weight average molecular weight of the acrylic copolymer ranges from 50000 to 300000.

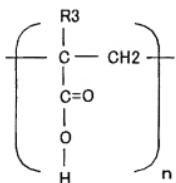
2. (Currently Amended) A method for manufacturing a method for manufacturing an ink jet head according to claim 1, wherein the (meta) acrylic ester is expressed by General Formula (1) and the (meta) acrylic acid is expressed by General Formula (2).

General Formula (1)



(Where where R1 is a hydrogen and an alkyl group in which carbon numbers range from 1 to 3, R2 is the alkyl group in which the carbon numbers ranges range from 1 to 3, and m is a positive integer.)

General Formula (2)



(Where where R3 is the hydrogen and the alkyl group in which carbon numbers range from 1 to 3 and n is a positive integer.)

3. (Currently Amended) A method for manufacturing a method for manufacturing an ink jet head according to claim 1, wherein the (meta) acrylic ester includes methacrylate ester.

4. (Original) A method for manufacturing an ink jet head according to claim 1, wherein the (meta) acrylic acid is methacrylic acid.

5. (Original) A method for manufacturing an ink jet head according to claim 1, wherein the (meta) acrylic ester includes methacrylate ester, and the (meta) acrylic acid is methacrylic acid.

6. (Original) A method for manufacturing an ink jet head according to claim 1, wherein an alkaline solution is used as a developing solution in the process of forming the structure which becomes the ink flow path.

7. (Currently Amended) A method for manufacturing an ink jet head according to claim 6, wherein a developing solution containing (1) glycol ether having carbon numbers not lower than 6, the glycol ether being able to be mixed with water at an arbitrary proportion,

(2) a nitrogen-containing basic organic solvent, and

(3) water

is used as the developing solution.

8. (Currently Amended) A method for manufacturing an ink jet head according to claim 7, wherein the glycol ether is at least one ~~kind~~ of ethylene glycol monobutyl ether and diethylene glycol monobutyl ether.

9. (Currently Amended) A method for manufacturing an ink jet head according to claim 7, wherein the nitrogen-containing basic organic solvent is at least one ~~kind~~ of ethanolamine and morpholine.

10. (Currently Amended) A method for manufacturing an ink jet head according to claim 1, wherein a solvent used for a coating resin mainly containing methyl isobutyl ketone and/or xylene is used in the process of coating with the negative type resist layer.

11. (Currently Amended) A method for manufacturing an ink jet head according to claim 1, wherein the acrylic copolymer composition contains the (meta) acrylic acid unit at a proportion of 5 to 15 weight%.

12. (Original) An ink jet head which is manufactured by the method for manufacturing an ink jet head according to claim 1.